UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,446	07/02/2005	Junichi Ooka	260917US3PCT	8610	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER		
			FENSTERMACHER, DAVID MORGAN		
ALEAANDMA, VA 22314			ART UNIT	PAPER NUMBER	
			3656		
			NOTIFICATION DATE	DELIVERY MODE	
			02/12/2009	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	Application No.	Applicant(s)				
Office Action Occurrence	10/511,446	OOKA, JUNICHI				
Office Action Summary	Examiner	Art Unit				
	David M. Fenstermacher	3656				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18 No.	ovember 2008.					
	action is non-final.					
3) Since this application is in condition for allowan		secution as to the merits is				
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	•					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce		Examiner.				
Applicant may not request that any objection to the o						
Replacement drawing sheet(s) including the correcti	<del>-</del> · · · · · · · · · · · · · · · · · · ·	, ,				
11) The oath or declaration is objected to by the Ex		• • •				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 LLS C & 110(a)	-(d) or (f)				
a)⊠ All b)□ Some * c)□ None of:	priority under 35 0.5.6. § 119(a)	-(u) or (i).				
1. ☐ Certified copies of the priority documents	s have been received					
2. Certified copies of the priority documents		on No				
3. Copies of the certified copies of the prior						
application from the International Bureau	•	a in this National Stage				
* See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	d				
Coo and attached detailed office action for a list of	s. a.o common copies not receive	•••				
Attachment(s)	. 🗖					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P					
Paper No(s)/Mail Date <u>12/3/08</u> . 6) Other:						

Application/Control Number: 10/511,446 Page 2

Art Unit: 3656

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 11-300446 (cited by Applicant).

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mentley (2,346,266).

Mentley shows the claimed invention where a gear has crowning on different surfaces of the gear tooth (as seen in figures 2-6); these figures show that depending on the placement of the crowning, different results will be achieved. It is well established that Crowned Gears are necessary for applications where noise is a concern. Crowning

Application/Control Number: 10/511,446 Page 3

Art Unit: 3656

gear teeth reduces noise by alleviating misalignment through either assembly or thrust problems.

Mentley is silent to the method used for making the crowning (forging or cutting).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a forging or cutting process to shape a gear since this is an old and well known method of shaping gears.

## Response to Arguments

3. Applicant's arguments filed 11/18/08 have been fully considered but they are not persuasive. Applicant has amended the claims to recite how the crowning is done on the gear. This is not persuasive since forging and cutting is an old and well known method of shaping gear teeth.

#### Conclusion

4. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

# **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents

Art Unit: 3656

P.O. Box 1450 Alexandria, VA 22313-1450
on (Date)
Typed or printed name of person signing this certificate:
Signature:
Registration Number:
Certificate of Transmission
I hereby certify that this correspondence is being facsimile transmitted to the United States Patent an Trademark Office, Fax No. ( ) on (Date)
Typed or printed name of person signing this certificate:
Signature:
Registration Number:

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Fenstermacher whose telephone number is 571-272-7102. The examiner can normally be reached on 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/511,446 Page 5

Art Unit: 3656

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M. Fenstermacher Primary Examiner Art Unit 3656

/David M. Fenstermacher/ Primary Examiner, Art Unit 3656